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EXAMINER

SHERR, CRISTINA O

ART UNIT	PAPER NUMBER
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3685

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/592,148	Applicant(s) PARK, TAE JOON	
	Examiner CRISTINA OWEN SHERR	Art Unit 3685	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 January 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 132-155 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 132-155 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>5 IDS's</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is in response to Applicant's Amendment filed January 9, 2009. Claims 132-155 are currently pending in this case. Pursuant to a Requirement for Restriction, claims 39, 41-45, 50-56, 58-59, 70-131 have been canceled. Note that, prior to the Requirement for Restriction, claims 70-155 had been newly added.

Election/Restrictions

2. Applicant's election without traverse of claims 132-155 in the reply filed on January 9, 2009 is acknowledged.

Information Disclosure Statement

3. The information disclosure statements (IDS) (five such statements) submitted on March 9, 2009, January 30, 2009, October 20, 2008, August 18, 2008, and June 17, 2008 are in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statements are being considered by the examiner.

Response to Arguments

4. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection, particularly in view of the amendments to the claims.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. In this case, claims 132-140 are rejected under 35 U.S.C. §101 because the claimed invention is directed to non-statutory subject matter. Based on Supreme Court precedent (See also *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437

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U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780, 787-88 (1876)) and recent Federal Circuit decisions, a §101 process must (1) be tied to another statutory class (such as a particular apparatus) or (2) transform underlying subject matter (such as an article or materials) to a different state or thing. In addition, the tie to a particular apparatus, for example, cannot be mere extra-solution activity. *In re Bilski*, 88 USPQ2d 1385 (Fed. Cir. 2008).

7. An example of a method claim that would not qualify as a statutory process would be a claim that recited purely mental steps.

8. To meet prong (1), the method step should positively recite the other statutory class (the thing or product) to which it is tied. This may be accomplished by having the claim positively recite the machine that accomplishes the method steps. Alternatively or to meet prong (2), the method step should positively recite identifying the material that is being changed to a different state or positively recite the subject matter that is being transformed.

9. In this particular case, claim 132 fails prong (1) because no user device is recited. In other words, data is somehow processed without any device being used, additionally, because the "tie" (e.g. digital data) is representative of extra-solution activity. Additionally, the claim fails prong (2) because the method steps do not transform the underlying subject matter to a different state or thing. For these reasons, independent claim 132 and its dependent claims 133-140 are rejected under section 101.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

11. Claims 132, 133, 135 138, 141, 142, 144, 147, 150, 151, 153 are rejected under 35 U.S.C. 102(a)are rejected under as being anticipated by Roth et al (US 5,243,650).

12. Regarding claims 132, 141, 150–

13. Roth discloses a method of processing digital data, comprising:

receiving one or more scrambled data units and a control data, the control data being used for controlling a parameter of a scrambling/descrambling operation and the same control data being used for one or more succeeding data units; (e.g. fig. 2; col 1:57-60; col 2:36-47, 55-57; col 3:2-4, 30-38; col 3:66-4:6; col 4:15-20) and

descrambling the one or more scrambled data units and the one or more succeeding data units based on the same control data. (e.g. fig4; col 3:30-38; col 4:15-29).

14. Regarding claims 133, 142, 151 –

15. Roth discloses wherein the control data is used to initialize a descrambler for performing the descrambling operation, and wherein the descrambling step includes initializing the descrambler based on the control data. (col 3:66-4:29).

16. Regarding claims 135, 144, 153-

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17. Roth discloses a method wherein the control data is changed or refreshed periodically, and wherein the descrambling step descrambles one or more succeeding data units based on the changed or refreshed control data. (col 3 ln 66- col 4 ln 29).

18. Regarding claims 138, 147 –

Roth discloses wherein the descrambling step descrambles the digital data in such a manner that the digital data is not protected. (e.g. col 2 ln 32-50).

Claim Rejections - 35 USC § 103

19. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

20. Claims 134-155 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roth et al (US 5,243,650) in view of Bourel (US 5,530,756).

21. Roth discloses as discussed above.

22. Regarding claims 134, 143, 152 –

23. Bourel discloses, as Roth does not, a method, wherein the digital data comprises a plurality of data blocks including a first data block, each data block including one data unit and a header, at least the header in the first data block including the control data, and wherein the descrambling step descrambles the data unit except for the header. (e.g. col 5 ln 46- col 6 ln 5).

24. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Roth to include detecting the control data based on a

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signal associated with the position of the control data within the first sub data unit as disclosed in Bourel in order to allow for the use of a single control word for both an audio and video signal when the signal are not synchronized.

25. Regarding claims 136, 145, 154 -

26. Bourel discloses wherein at least two scrambled data units and a header including the control data comprise one data group, the header including the control data, and wherein the method further comprises:

demultiplexing the at least two scrambled data units and the header from one data group before the descrambling step. (e.g. col 5 ln 46- col 6 ln 5).

27. Regarding claims 137, 146 –

28. Bourel discloses wherein the data group includes at least two packets, at least first packet including the header, and wherein the demultiplexing step demultiplexes the at least two packets from one data group. (e.g. col 5 ln 63- col 6 ln5).

29. Claims 134-155 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roth et al (US 5,243,650) in view of Bourel (US 5,530,756), further in view of Kanota et al (US 5,418,853).

30. Roth and Bourel disclose a discussed above.

31. Regarding claims 139, 148, 155 –

32. Kanota discloses copy prevention information, the copy prevention information including one of current generation information and allowable generation information, the current generation information indicating a number of times the digital data has been copied and the allowable generation information indicating a number of permitted copies

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of the digital data, and wherein the method further comprises: performing a copy prevention function such that copying of digital data is not permitted if the copy prevention information indicates that copying of digital data is not permitted. (fig 2; col 4 ln 61-col 5 ln 14).

33. It would have been obvious to one of ordinary skill in the art to combine Bourel, Roth and Kanota in order to include detecting the control data based on a signal associated with the position of the control data within the first sub data unit as disclosed in Bourel in order to allow for the use of a single control word for both an audio and video signal when the signal are not synchronized and further to combine with Kanota since the encryption of software or digital data in Roth is equivalent to copy control as in Kanota.

34. Regarding claim 140, 149 –

35. Kanota discloses wherein the descrambling step is performed only if the copy prevention information indicates that copying of digital data is permitted. (E.G. COL 5 LN 1-15).

36. Examiner's note: Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant.

Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may be applied as well. It is respectfully requested from the applicant, in preparing the responses, to fully consider the references in entirety as potentially teaching all or part

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of the claimed invention as well as the context of the passage as taught by the prior art or disclosed by the examiner.

Conclusion

37. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

38. Walker et al (US 5,054,064) disclose a video control system for recorded programs.

39. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

40. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

41. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CRISTINA OWEN SHERR whose telephone number is

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(571)272-6711. The examiner can normally be reached on 8:30-5:00 Monday through Friday.

42. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Calvin L. Hewitt, II can be reached on (571)272-6709. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

43. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CRISTINA OWEN SHERR
Examiner
Art Unit 3685

/Calvin L Hewitt II/
Supervisory Patent Examiner, Art Unit 3685